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E01D

(54) **A demountable bridge assembly**

(57) A demountable bridge assembly (1) is formed from a plurality of interconnectable bridge sections of equal length, the number of bridge sections being divisible by three. The length of each bridge section is from 7 to 7.50 m. One in every three bridge sections has a dividing line (2) in its central region so that it can be divided into two sub-sections. Such an assembly can be loaded, in a particularly economical manner, both onto lorries and onto transporter tanks.

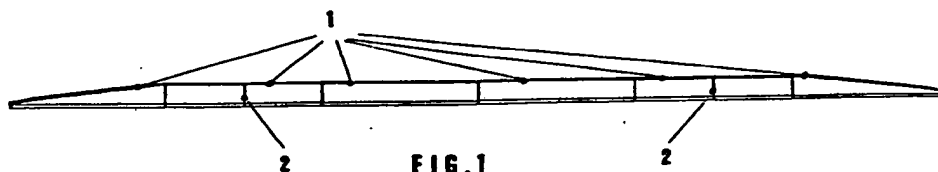


FIG. 1

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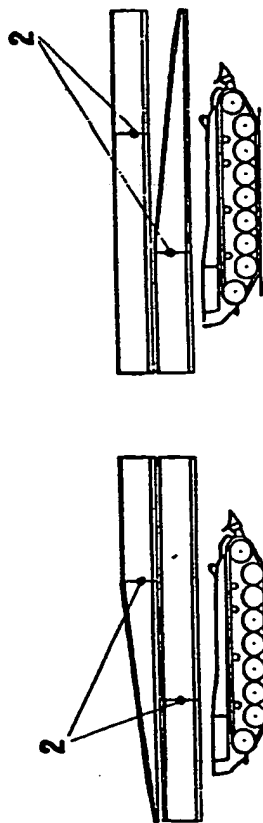
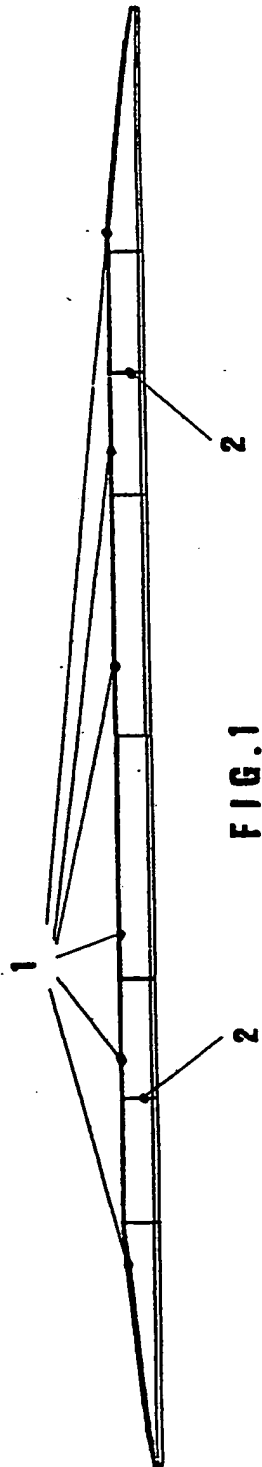


FIG. 3

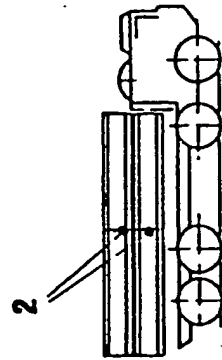


FIG. 7

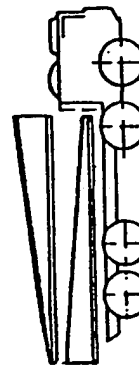


FIG. 6

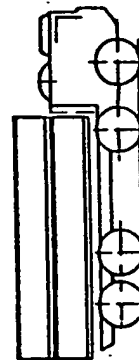


FIG. 5

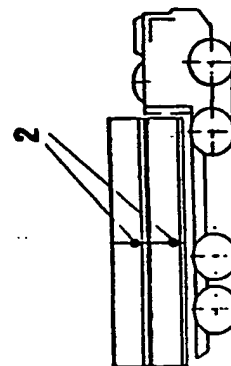


FIG. 4

A DEMOUNTABLE BRIDGE ASSEMBLY

The present invention relates to a demountable bridge suitable for transportation on vehicles.

Demountable bridges are used as a temporary expedient
5 to span crevasses or stretches of water. They are especially used in exploration and in military and civil engineering work when natural obstacles render the use of conventional land vehicles impossible. They are also
10 used when the span width or length of conventional armour-plated hinged bridges is not adequate.

Demountable bridges are transported on lorries over relatively long distances but, for laying purposes, they are conveyed on, for example, transporter tanks which can
15 transport longer objects than lorries. The invention relates to a bridge suitable for such transportation. The present invention seeks to provide a bridge assembly which can be loaded in a particularly economical manner onto both lorries and transporter tanks, depending on their
20 particular length.

According to the present invention, there is provided a demountable bridge assembly formed from a plurality of interconnectable bridge sections of equal length, the
25 number of bridge sections being divisible by three and the length of each bridge section being from 7 to 7.50 m, one in every three of the sections being provided with a central dividing line to permit such section to be divided into two sub-sections.

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A bridge according to the present invention can be loaded onto a minimum number of haulage vehicles, that

is to say both lorries and transporter tanks. The loading surface capacity both of lorries and of transport tanks is therefore particularly well utilised. This has been ascertained in extensive tests using conventional vehicles during which many features such as the loading surface size or area, the load capacity and the mobility of the vehicles have been taken into consideration.

One embodiment of a bridge assembly in accordance with the present invention will be further described, by way of example, with reference to the accompanying drawings, in which:-

Fig. 1 is a side elevational view of the bridge in its assembled state;

Fig. 2 and Fig. 3 show the dismantled bridge portions located on transporter tanks; and

Fig. 4 to Fig. 7 show the dismantled bridge portions located on lorries, the lorry shown in Fig. 7 being loaded with pre-formed bridge supports.

In Fig. 1, there is shown a bridge assembly generally referenced 1, formed from six elongate bridge sections, of which two are end ramp sections and four are internal sections. Each of the elongate bridge sections 1 has a length of 7 m. The two bridge sections situated adjacent the end ramp sections each have an additional, centrally located, dividing line 2. In consequence, each of the two 7 m sections having the dividing line 2 can be split into two sub-sections, each having a length of 3.50 m. The total length of the bridge is 42 m. For the long-distance transportation of a bridge having such a length only three lorries are needed to carry the bridge roadway sections (those shown in Figs. 4 to 6)

with one further lorry (that shown in Fig. 7) being required to carry pre-formed bridge supports. Only two transporter tanks (shown in Figs. 2 and 3) are required for further transportation at the site where the bridge is to be
5 laid, the tanks supporting the preconstructed bridge supports between the bridge roadway sections.

CLAIMS

1. A demountable bridge assembly formed from a plurality of interconnectable bridge sections of equal length, the number of bridge sections being divisible by three and the length of each bridge section being formed from 7 to 7.50 m, one in every three of the sections being provided with a central dividing line to permit such section to be divided into two sub-sections.
2. A demountable bridge assembly as claimed in claim 1 constructed substantially as hereinbefore described with reference to the accompanying drawings.

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